

***ENGLISH TRANSLATION
OF THE ANNEXES TO THE
INTERNATIONAL PRELIMINARY
EXAMINATION REPORT***

English translation of the amendments under Article 34 PCT of the International Patent
Application No. PCT/CH2004/000014 "Casting machine" in the name of LAMEC AG

Claims

1. A caterpillar casting method for a continuous fabrication of billets and bands of metallic or non-metallic materials characterised in that it is carried out in a casting mould which is formed by blocks (4) which circulate caterpillar-like on a transport means around a casting caterpillar (2;3) and are held at least on a portion t of the circulation path U , where they would fall off said transport means due to gravity, on said transport means by means of stationarily fixed magnets.
2. A casting method as claimed in claim 1, characterised in that the mould comprises an upper and a lower casting caterpillar (2;3).
3. A casting method as claimed in claim 1 or 2, characterised in that the ratio between the portion t on which the blocks (4) are held on the transport means by means of stationary magnets and the total circulation path U of the at least one casting caterpillar (2;3), $t : U$, is between 0.55 and 0.95.
4. A casting machine (1) for carrying out the method as claimed in one of claims 1 to 3, characterised in that the continuous fabrication of billets and bands of metallic and non-metallic materials is done with a mould in which at least one wall consists of blocks (5) which circulate caterpillar-like around at least one casting caterpillar (2;3), whereby the blocks (4) lay loosely on a transport means, preferably a chain (20), so that upon temperature changes they may be deformed in all directions, said blocks being pulled at least on a portion of the circulation path of the at least one casting caterpillar (2;3) by means of stationary magnets against the tracks (31) and guided by the transport means so that the blocks (4) are movable in a contactless manner over the stationary magnets.
5. A casting machine (1) as claimed in claim 4, characterised in that the magnets are permanent magnets or preferably electromagnets.
6. A casting machine (1) as claimed in claim 5, characterised in that as magnets a number of separate magnets are provided.